

**CLAIMS**

The embodiments of an invention in which an exclusive property or right is claimed are defined as follows:

- 2           1.     A display interface device for an individual personal computer,  
workstation, or embedded system, said device comprising:
- 4                 one or more display interface means connectable to a computer  
bus of said individual personal computer, workstation, or embedded system;
- 6                 means for storing video library information; and  
                  a plurality of means for driving any one of a plurality of video
- 8     displays of a plurality of types connected to said one or more display interface  
means from output of said video library.
2.     The device of Claim 1, wherein said video library information is  
OpenGL video library information.
3.     The device of Claim 1, wherein said plurality of driving means  
comprises means for driving both stroke and raster display types.
4.     The device of Claim 1, wherein said plurality of driving means  
comprises means for simultaneously driving stroke displays of different types.

5. The device of Claim 1, wherein said plurality of driving means comprises means for simultaneously driving raster displays of different types.

6. The device of Claim 1, wherein said plurality of driving means comprises means for driving hybrid stroke/raster displays.

7. The device of Claim 1, wherein said one or more display interface means comprises a plurality of interface card mezzanines.

8. The device of Claim 1 further comprising means for dynamically switching between displays.

9. The device of Claim 8, wherein said switching means operates in real time.

- 2           10. A display interface method comprising the steps of:
- providing one or more display interface means connectable to a
- 4 computer bus of an individual personal computer, workstation, or embedded system;
- 6                   providing a video library; and
- driving any one of a plurality of video displays of a plurality of
- 8 types connected to the one or more display interface means from output of the video library.

17. The method of Claim 10 further comprising the step of dynamically switching between displays.

18. The method of Claim 17, wherein the dynamic switching step operates in real time.

2 19. A device for driving stroke displays using formats designed for raster displays, said device comprising:

4 means for linking generated code from said formats to a standard graphics library; and

6 stroke video drivers that ignore raster masking.

20. The device of Claim 19, wherein said formats are VAPS formats.

21. The device of Claim 19, wherein said standard graphics library comprises an OpenGL library.

22. The device of Claim 19, wherein said stroke video drivers use occlusion memory.

23. The device of Claim 19 further comprising means for driving both stroke and raster displays.

24. The device of Claim 23 further comprising means for dynamically switching between stroke and raster displays.

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2           26.     A method for driving stroke displays using formats designed for  
raster displays, the method comprising the steps of:

4                     linking generated code from the formats to a standard graphics  
library; and

6                     providing stroke video drivers that ignore raster masking.

27. The method of Claim 26, wherein the linking step comprises linking VAPS generated code.

28. The method of Claim 26, wherein the linking step comprises linking to an OpenGL library.

29. The method of Claim 26, wherein the providing step comprises providing stroke video drivers use occlusion memory rather than raster masking.

30. The method of Claim 26 further comprising the step of driving both stroke and raster displays.

31. The method of Claim 30 further comprising the step of dynamically switching between stroke and raster displays.

32. The method of Claim 31, wherein the switching step operates in real time.

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2 33. ~~A computer device for driving multiple displays of different types~~  
4 using formats designed for raster displays, said device comprising:  
6 means for linking generated code from said formats to a standard  
8 graphics library;  
means for driving a plurality of displays of different types from  
output of said graphics library; and  
time. means for dynamically switching between said displays in real

34. The device of Claim 33, wherein said graphics library comprises an OpenGL graphics library.

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35. ~~The device of Claim 33, wherein said formats are VAPS formats.~~

36. The device of Claim 33, wherein said driving means comprise stroke video drivers using occlusion memory.

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~~linking generated code from the formats to a standard graphics  
library;  
driving a plurality of displays of different types from output of the  
graphics library; and  
dynamically switching between the displays in real time.~~

44. The method of Claim 43, wherein the linking step comprises  
linking to an OpenGL graphics library.

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45. ~~The method of Claim 43, wherein the linking step comprises  
linking VAPS generated code.~~

46. The method of Claim 43, wherein the driving step comprises  
employing stroke video drivers using occlusion memory rather than raster  
masking.

47. The method of Claim 43 wherein, the driving step comprises  
driving hybrid stroke/raster displays.

2 48. A method for driving a hybrid stroke/raster display using formats  
designed for raster displays, the method comprising the steps of:

4 linking generated code from the formats to a standard graphics  
library; and



2 providing stroke and raster display inputs from output of the  
graphics library.

49. The method of Claim 48, wherein the linking step comprises  
linking to an OpenGL graphics library.

50. The method of Claim 48 further comprising the step of providing  
stroke video drivers using occlusion memory.

51. The method of Claim 48 further comprising the step of  
dynamically switching between stroke and raster video drivers in real time.

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52. ~~The method of Claim 51, wherein the linking step comprises  
linking VAPS generated code.~~